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| APPLICATION NO.  | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|---------------|----------------------|---------------------|-----------------|
| 10/623,605   | 07/22/2003    | Victor W. Lee        | 2207/16345          | 5033            |
| 75   | 90 10/04/2005 |                      | EXAM                | INER            |
| B. Delano Jordan   |               |                      | BAKER, STEPHEN M    |                 |
| c/o BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP<br>12400 WILSHIRE BOULEVARD, SEVENTH FLOOR<br>LOS ANGELES, CA 90025 |               |                      | ART UNIT            | PAPER NUMBER    |
|  |               |                      | 2133                |                 |

DATE MAILED: 10/04/2005 -

Please find below and/or attached an Office communication concerning this application or proceeding.

| - 1 A  |                  |              |  |  |  |
|--|------------------|--------------|--|--|--|
|  | Application No.  | Applicant(s) |  |  |  |
| Office Action Summan   | 10/623,605       | LEE ET AL.   |  |  |  |
| Office Action Summary  | Examiner         | Art Unit     |  |  |  |
| The MAIL INO DATE of this communication and  | Stephen M. Baker | 2133         |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |                  |              |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                  |              |  |  |  |
| Status   |                  |              |  |  |  |
| 1) Responsive to communication(s) filed on 14 July 2005.   |                  |              |  |  |  |
|  |                  |              |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is  |                  |              |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |                  |              |  |  |  |
| Disposition of Claims  |                  |              |  |  |  |
| <ul> <li>4) Claim(s) 1-27 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) Claim(s) 11-13 is/are allowed.</li> <li>6) Claim(s) 1,2,6,7,9,10,14,15,19,20,23,24,26 and 27 is/are rejected.</li> <li>7) Claim(s) 3-5,8,16-18,21 and 25 is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>  |                  |              |  |  |  |
| Application Papers   |                  |              |  |  |  |
| 9) The specification is objected to by the Examiner.   |                  |              |  |  |  |
| 10)⊠ The drawing(s) filed on <u>22 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.  |                  |              |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |                  |              |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |                  |              |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |                  |              |  |  |  |
| Priority under 35 U.S.C. § 119   |                  |              |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |                  |              |  |  |  |
| Attachment(s)  |                  |              |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |                  |              |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  Compared Office.   |                  |              |  |  |  |

#### **DETAILED ACTION**

### Claim Objections

1. Claim 15 is objected to because of the following informalities: in line 4 of claim 15, "to have" apparently should be "having". Appropriate correction is required.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 3. Claims 1, 14, 22 and 23 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,346,895 to Lee *et al* (hereafter "Lee").

Lee discloses arrangements for transmitting data on a high-speed computer link by encoding the data to meet a minimum transition density requirement. The number of transitions in an (n+1) -bit pre-code word is determined and, if the number of transitions is determined to be less than n/2, then alternate bits are inverted, thereby producing a transmission word that may be referred to as a "retraining flit" that is based on the minimum transition density.

Regarding claim 23, a high-speed computer link provides "bus interconnecting ... processors."

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### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2, 6, 7, 9, 10, 15, 19, 20, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee.

Regarding claims 2, 6, 9, 15, 19, 24 and 27, Lee does not mention providing control data and error detection data with the high-speed computer link payload data transmitted by Lee's arrangements. Official Notice is given that providing control data (such as a header) and error detection data (such as a checksum to be evaluated at the receiver) along with payload data on a high-speed computer link was well known and typical of standard computer communication protocols at the time the invention was made. Such error detection data is used for checking the transmitted signal for transmission errors. Headers and checksums are considered overhead data and overhead regions may be referred to as "sideband" regions. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to implement Lee's high-speed computer link with control data and error detection data provided along with the payload data. Such an implementation would have been obvious because providing control data and error detection data along with payload

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data on a high-speed computer link was already well known and typical of standard computer communication protocols.

Regarding claim 10, removal of the alternate bit inversions at the receiver, as required by Lee's arrangements, can be considered as "filtering the retraining flit out."

Regarding claims 7 and 20, Lee does not mention transmitting multiple copies of data generated by Lee's arrangements. Official Notice is given that the advantages of transmitting multiple copies of data on a computer data link were well known at the time the invention was made. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to implement Lee's high-speed computer link with transmission of multiple copies of data. Such an implementation would have been obvious because the advantages of transmitting multiple copies of data on a computer data link were already well known.

Regarding claim 26, Lee does not mention implementing the logic of Lee's transmitting arrangements by means of programmed instructions. Official Notice is given that the advantages (e.g. ease of development, distribution and upgrading) of implementing logic by means of programmed instructions were well known at the time the invention was made. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to implement Lee's high-speed computer link arrangement logic by means of programmed instructions. Such an implementation would have been obvious because the advantages of implementing logic by means of programmed instructions were already well known.

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## Allowable Subject Matter

6. Claims 11-13 are allowed.

7. Claims 3-5, 8, 16-18, 21 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Baker whose telephone number is (571) 272-3814. The examiner can normally be reached on Monday-Friday (11:00 AM - 7:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen M. Baker Primary Examiner Art Unit 2133

smb